

**IN THE CLAIMS:**

Claims 1-2. (Cancelled)

3. (Currently Amended) A display device comprising a pixel portion and a driver circuit portion on a substrate, said pixel portion comprising:

a semiconductor film comprising a plurality of channel forming regions, a plurality of impurity regions, a source region, and a drain region;

a gate electrode overlapping with the plurality of channel forming regions and some of the plurality of impurity regions, with a gate insulating film interposed therebetween;

a gate wiring electrically connected to said gate electrode;

a source wiring electrically connected to one of said source region and said drain region; and;

a pixel electrode over said source wiring,

wherein said some of the plurality of impurity regions are located between the plurality of channel forming regions in the semiconductor film and contain a low concentration impurity region and a high concentration impurity region

wherein a thickness of a gate insulating film of a TFT in said driver circuit portion is thinner than that of the gate insulating film of a TFT in the pixel portion, and

wherein a first portion of said source wiring overlapped with said gate wiring has smaller line width than a second portion of said source wiring not overlapped with said gate electrode wiring, and a portion of said second portion overlaps with said pixel electrode.

4. (Currently Amended) A display device comprising a pixel portion and a driver circuit portion on a substrate, said pixel portion comprising:

a semiconductor film comprising a plurality of channel forming regions, a plurality of impurity regions, a source region, and a drain region;

a gate electrode overlapping with the plurality of channel forming regions and some of the plurality of impurity regions, with a gate insulating film interposed therebetween;

a gate wiring electrically connected to said gate electrode;

a source wiring electrically connected with one of said source region and said drain region; and

a pixel electrode over said source wiring,

wherein said some of the plurality of impurity regions are located between the plurality of channel forming regions in the semiconductor film and contain a low concentration impurity region and a high concentration impurity region,

wherein a gate insulating film of a TFT in said driver circuit portion and a dielectric of a storage capacitor formed in said pixel portion comprise the same material and have the same film thickness,

wherein the thickness of the gate insulating film of the TFT in said driver circuit portion is thinner than that of the gate insulating film of a TFT in the pixel portion, and

wherein a first portion of said source wiring overlapped with said gate wiring has smaller line width than a second portion of said source wiring not overlapped with said gate electrode wiring, and a portion of said second portion overlaps with said pixel electrode.

5. (Previously Presented) An electronic equipment comprising the display device according to claim 3, wherein said electronic equipment is selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a navigation system, a sound reproduction device, a notebook type personal computer, a game machine, a portable information terminal, a mobile computer, a portable telephone, a portable game machine, an electronic book, and an image reproduction device having a recording medium.

6. (Previously Presented) The display device according to claim 3, wherein said plurality of impurity regions comprises a plurality of low concentration impurity regions, a high concentration impurity region, and wherein said some of the plurality of low concentration impurity regions and the high concentration impurity region are located between the plurality of the channel forming regions in the semiconductor film.

7. (Previously Presented) The display device according to claim 6, wherein each of said plurality of low concentration impurity regions contains an element at a concentration of  $2 \times 10^{16}$  to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>, and said high concentration impurity region contains the element at a concentration of  $5 \times 10^{19}$  to  $3 \times 10^{21}$  atoms/cm<sup>3</sup>.

8. (Previously Presented) The display device according to claim 4, wherein said plurality of impurity regions comprises a plurality of low concentration impurity regions, a high concentration impurity region, and wherein said some of the plurality of low concentration impurity regions and the high concentration impurity region are located between the plurality of the channel forming regions in the semiconductor film.

9. (Previously Presented) The display device according to claim 4, wherein at least two of said plurality of impurity regions overlapped with the gate electrode contain an element at a concentration of  $2 \times 10^{16}$  to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>, and at least one of the plurality of impurity regions overlapped with the gate electrode contains the element at a concentration of  $5 \times 10^{19}$  to  $3 \times 10^{21}$  atoms/cm<sup>3</sup>.

10. (Previously Presented) An electronic equipment comprising the display device according to claim 4, wherein said electronic equipment is selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a navigation system, a sound reproduction device, a notebook type personal computer, a game machine, a portable information terminal, a mobile computer, a portable telephone, a portable game machine, an electronic book, and an image reproduction device having a recording medium.

Claims 11-15. (Cancelled)

16. (Currently Amended) A display device comprising a pixel portion and a driver circuit portion on a substrate, said pixel portion comprising:

a semiconductor film comprising at least two channel forming regions, at least one first impurity region, at least one second impurity region, a source region, and a drain region;

a gate electrode overlapped with said at least two channel forming regions and the first impurity region, and a part of the second impurity region with a gate insulating film interposed therebetween;

a gate wiring electrically connected to said gate electrode;

a source wiring electrically connected with one of said source region and said drain region; and

a pixel electrode over said source wiring,  
wherein one of the at least two channel forming regions is located between the first impurity region and the second impurity region,  
wherein a thickness of a gate insulating film of a TFT in said driver circuit portion is thinner than that of the gate insulating film in the pixel portion, and  
wherein a first portion of said source wiring overlapped with said gate wiring has smaller line width than a second portion of said source wiring not overlapped with said gate electrode wiring, and a portion of said second portion overlaps with said pixel electrode.

17. (Previously Presented) An electronic equipment comprising the display device according to claim 16, wherein said electronic equipment is selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a navigation system, a sound reproduction device, a notebook type personal computer, a game machine, a portable information terminal, a mobile computer, a portable telephone, a portable game machine, an electronic book, and an image reproduction device having a recording medium.

18. (Currently Amended) A display device comprising a pixel portion and a driver circuit portion on a substrate, said pixel portion comprising:

a semiconductor film having at least two channel forming regions, first low concentration impurity regions and a second low concentration impurity region, a high concentration impurity region, a source region, and a drain region;

a gate electrode overlapping with said at least two channel forming regions, the first low concentration impurity regions, the high concentration impurity region, and a portion of the second low concentration impurity region, with a gate insulating film interposed therebetween;

a gate wiring electrically connected to said gate electrode;

a source wiring electrically connected with one of said source region and said drain region; and

a pixel electrode over said source wiring,

wherein the high concentration impurity region is located between the at least two channel forming regions,

wherein a gate insulating film of a TFT in said driver circuit portion and a dielectric of a storage capacitor formed in said pixel portion comprise the same material and have the same film thickness, and

wherein a first portion of said source wiring overlapped with said gate wiring has smaller line width than a second portion of said source wiring not overlapped with said gate electrode wiring, and a portion of said second portion overlaps with said pixel electrode.

19. (Previously Presented) The display device according to claim 18, wherein a thickness of a gate insulating film of a TFT in said driver circuit portion is thinner than that of the gate insulating film in the pixel portion.

20. (Previously Presented) An electronic equipment comprising the display device according to claim 18, wherein said electronic equipment is selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a navigation system, a sound reproduction device, a notebook type personal computer, a game machine, a portable information terminal, a mobile computer, a portable telephone, a portable game machine, an electronic book, and an image reproduction device having a recording medium.

21. (Previously Presented) The display device according to claim 3, wherein the plurality of impurity regions have the same conductivity as the source region and the drain region.

22. (Previously Presented) The display device according to claim 9, wherein the element belongs to group XV in the periodic table.

23. (Previously Presented) The display device according to claim 4, wherein the plurality of impurity regions have the same conductivity as the source region and the drain region.

24. (Previously Presented) The display device according to claim 6, wherein the high concentration impurity region is located between a pair of the plurality of low concentration impurity regions under the gate electrode.

25. (Previously Presented) The display device according to claim 7, wherein the element belongs to group XV in the periodic table.

26. (Previously Presented) The display device according to claim 16, wherein the first impurity region and the second impurity region have the same conductivity as the source region and the drain region.

27. (Previously Presented) The display device according to claim 16, wherein each of the first impurity region and the second impurity region contains an element at a concentration of  $2 \times 10^{16}$  to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>, and

wherein the semiconductor film further comprises a third impurity region including the element at a concentration of  $5 \times 10^{19}$  to  $3 \times 10^{21}$  atoms/cm<sup>3</sup>.

28. (Previously Presented) The display device according to claim 27, wherein the element belongs to group XV in the periodic table.

29. (Previously Presented) The display device according to claim 16, wherein a gate insulating film of a TFT in said driver circuit portion and a dielectric of a storage capacitor formed in said pixel portion comprise the same material and have the same film thickness.

30. (Previously Presented) The display device according to claim 18, wherein the first low concentration impurity region, the second low concentration impurity region and the high concentration impurity region have the same conductivity as the source region and drain region.

31. (Previously Presented) The display device according to claim 18, wherein the high concentration impurity region is located between a pair of the first low concentration impurity regions.

32. (Previously Presented) The display device according to claim 18, wherein each of the first low concentration impurity regions and the second low concentration impurity region contains an element at a concentration of  $2 \times 10^{16}$  to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>, and the high concentration impurity region includes the element at a concentration of  $5 \times 10^{19}$  to  $3 \times 10^{21}$  atoms/cm<sup>3</sup>.

33. (Previously Presented) The display device according to claim 32, wherein the element belongs to group XV in the periodic table.

34. (Cancelled)

35. (Currently Amended) A semiconductor device comprising:  
a semiconductor film having at least first and second channel forming regions, first, second, third, and fourth low concentration impurity regions, a high concentration impurity region, a source region, and a drain region;

a gate electrode overlapping with the first and second channel forming regions, the second and third low concentration impurity regions, the high concentration impurity region, and portions of the first and fourth low concentration impurity regions, with a gate insulating film interposed therebetween; and

a gate wiring electrically connected to said gate electrode;

a source wiring electrically connected with one of said source region and said drain region; and

a pixel electrode over said source wiring,

wherein the high concentration impurity region is located between the first and second channel forming regions, and

wherein a first portion of said source wiring overlapped with said gate wiring has smaller line width than a second portion of said source wiring not overlapped with said gate electrode wiring, and a portion of said second portion overlaps with said pixel electrode.

36. (Previously Presented) The semiconductor device according to claim 35, wherein the first, second, third, and fourth low concentration impurity regions and the high concentration impurity region have the same conductivity as the source region and the drain region.

37. (Previously Presented) The semiconductor device according to claim 35, wherein the high concentration impurity region is located between the second and third low concentration impurity regions in the semiconductor film.

38. (Previously Presented) The semiconductor device according to claim 35, wherein each of said first, second, third, and fourth low concentration impurity regions contains an element at a concentration of  $2 \times 10^{16}$  to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>, and said high concentration impurity region contains the element at a concentration of  $5 \times 10^{19}$  to  $3 \times 10^{21}$  atoms/cm<sup>3</sup>

39. (Previously Presented) The semiconductor device according to claim 38, wherein the element belongs to group XV in the periodic table.

40. (Previously Presented) The semiconductor device according to claim 35, wherein a thickness of a gate insulating film of a TFT in said driver circuit portion is thinner than that of the gate insulating film in the pixel portion.

41. (Previously Presented) The semiconductor device according to claim 35, wherein a gate insulating film of a TFT in said driver circuit portion and a dielectric of a storage capacitor formed in said pixel portion comprise the same material and have the same film thickness.

42. (Previously Presented) An electronic equipment comprising the semiconductor device according to claim 35, wherein said electronic equipment is selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a navigation system, a sound reproduction device, a notebook type



personal computer, a game machine, a portable information terminal, a mobile computer, a portable telephone, a portable game machine, an electronic book, and an image reproduction device having a recording medium.